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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,726	06/26/2003	Pierre-Marc Allemand	12406-167001 / P2003,0423	5818
26181 7590 02/26/2007 FISH & RICHARDSON P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER ROY, SIKHA	
			ART UNIT 2879	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/26/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/606,726

Applicant(s)

ALLEMAND, PIERRE-MARC

Examiner

Sikha Roy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 11, 2006 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 22-24, 26, 31, 33 and 34 rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 6,562,452 to Ferri.

Regarding claim 22 Ferri discloses (column 13 lines 28-40, column 14 lines 1-10, column 15 lines 47) a getter composition (desiccating matrix) comprising a reactive

material disposed in an encapsulated device the reactive material comprising calcium oxide (adsorbing agent) and an inert material such as thermoplastic polymeric material, the inert material being adapted to respond to energy by heating (heating to a temperature at which it is flowable).

Regarding claims 23 and 34 Ferri discloses (column 14 lines 1-28) the inert material comprises copolymers of polyethylene, polyethylene oxide, low density polyethylene, polyamides.

Regarding claim 24 Ferri discloses the inert material comprises a binder (thermoplastic polymeric material) and the reactive material (the adsorbent material) is mixed with the binder.

Regarding claim 26 Ferri discloses the weight fraction of the reactive material in the inert material is 20 wt.% to 70 wt.%.

Regarding claim 31 Ferri discloses the reactive material is in a layer.

Regarding claim 33 Ferri discloses (column 16 line 67 through column 17 line 2) the inert material is a paraffin wax or microcrystalline wax.

Claims 22 –26, 29 –32 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,936,131 to McCormick et al.

Regarding claim 22 McCormick discloses (column 3 lines 18-42, column 4 line 54, column 5 lines 35-51) a getter composition (adsorbent loaded transfer adhesive) comprising a reactive material disposed in an encapsulated device the reactive material comprising calcium oxide and an inert material disposed in the encapsulated device the

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inert material comprising hot melt adhesive polyamide-polyether copolymer adapted to respond to energy by melting.

Regarding claim 23 McCormick discloses the inert material is polyamide.

Regarding claim 24 McCormick discloses the inert material comprises a binder and the reactive material is mixed with the binder.

Regarding claim 25 McCormick discloses (column 6 lines 15-17) the reactive material is substantially dispersed in the binder.

Regarding claim 26 McCormick discloses (column 5 lines 54-60) the weight fraction of the reactive material in the inert material is 10 wt.% to 70 wt.%.

Regarding claims 29 and 30 McCormick discloses the encapsulated device is an encapsulated organic light emitting device, an opto-electronic device.

Regarding claims 31 and 32 McCormick discloses (column 5 lines 64,65) the reactive material is in a layer having a thickness of 5 microns.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 27,28 and 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,936,131 to McCormick et al. as applied to claim 22 above, and further in view of U.S. Patent 6,737,176 to Otsuki et al.

Regarding claims 27 and 28 McCormick does not exemplify the particle size of the reactive material being in a range of 0.1 to 200 micrometer or 0.3 to 50 micrometer.

Otsuki in analogous field enclosure of electronic devices discloses (column 4 lines 24-30) the reactive material comprising desiccant in the shape of particle having average size between 0.1 micrometer and 10 micrometer. Otsuki further teaches the desiccant having this size of particles elevates moisture absorbing ability and effectively prevent any leakage in the encapsulated container.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to select the average particle size of the reactive material of McCormick to be 10 micrometer as disclosed by Otsuki for elevating moisture absorbing ability and effectively preventing any leakage in the encapsulated container.

Regarding claim 35 McCormick discloses a getter structure comprising reactive material of calcium oxide which is substantially more reactive than matter desorbed from at least one surface of a device mixed in an inert material of hot-melt adhesive adapted to respond to energy input by melting.

McCormick is silent about forming a first layer of reactive material and then a second layer of the inert material on the first layer.

Otsuki discloses (column 4 lines 8-23) the reactive material disposed in a first layer and then a second layer of the inert material disposed on the first layer. Otsuki teaches that this configuration results in the entire desiccant being not exposed to the inside of the device and hence can be used for desiccation for longer time.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to form the getter structure having a first layer of reactive material of McCormick and then a second layer of inert material of hot-melt adhesive formed on the first layer as suggested by Otsuki for providing the benefit of the entire desiccant being not exposed to the inside of the device and hence used for desiccation for longer time.

Regarding claim 36 McCormick and Otsuki disclose the first layer comprises calcium oxide.

Regarding claim 37 Otsuki discloses (column 5 lines 1-14) the thickness of the desiccant containing layer is preferably between 0.1 and 1000 micrometer.

Regarding claim 38 McCormick and Otsuki disclose the second layer comprising hot melt adhesive of polyamide.

Response to Arguments

Applicant's arguments with respect to claims 22 - 38 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 5,244,707 to Shores discloses polymers such as polyurethane, polyacrylates are used which melt at elevated temperature with reduced viscosity and are used for conformal coating. U.S. Patent 6,124,006 to Hekal and U.S. Patent 6,777,481 to Chu disclose polymers and wax-containing thermoplastic absorbent adhesives with flowability properties are useful in desiccating interior compartments of insulating glass units.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikha Roy whose telephone number is (571) 272-2463. The examiner can normally be reached on Monday-Friday 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sikha Roy

Sikha Roy
Patent Examiner
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